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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,045	02/25/2004	Hiroyuki Miyahara	0124/0023	8583

21395 7590 04/05/2007

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EXAMINER	
KHAN, USMAN A	
ART UNIT	PAPER NUMBER
2622	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/785,045	MIYAHARA ET AL.	
	Examiner	Art Unit	
	Usman Khan	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4 and 5* is/are rejected.

7)☒ Claim(s) *3* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *05/19/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 05/19/2004 has been considered by the examiner. The submission is in compliance with the provisions of 37 CFR 1.97.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

Claim 1 is objected to because of the following informalities: In claim 1 there are listed two separate "first means" this claim along with the spec should be corrected to more accurately describe the invention. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 – 2 and 4 - 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parulski et al. (US patent No. 5,440,343) in further view of Eikenberg (US patent No. 6,628,751).

Regarding **claim 1,** Parulski et al. teaches an imaging device comprising: a solid-state imaging element array including a matrix of photosensor pixels (figures 4, 5, and 7 – 9; column 2, lines 10 – 31 and column 3, lines 38 *et seq.*); first means for setting an effective area in the solid-state imaging element array to a first region during a first mode of operation of the imaging device (figure 9, 1536 pixel section; column 7, lines 12 – 46), and setting the effective area to a second region during a second mode of operation of the imaging device (figure 9, 1280 pixel section; column 7, lines 12 – 46), the first and second regions being different from each other in number of photosensor pixels contained therein (figure 9, 1536 pixel section and 1280 pixel section; column 7, lines 12 – 46);

However, Parulski et al. fails to disclose a holder for retaining the solid-state imaging element array: first means for moving the holder between a first position at which an optical axis related to light incident to the solid-state imaging element array coincides with a center of the first region and a second position at

which the optical axis coincides with a center of the second region; second means for fixing the holder at the first position during the first mode of operation of the imaging device, and fixing the holder at the second position during the second mode of operation of the imaging device; third means for generating a first picture signal from signal components generated in the first region of the solid-state imaging element array during the first mode of operation of the imaging device; and fourth means for generating a second picture signal from signal components generated in the second region of the solid-state imaging element array during the second mode of operation of the imaging device.

Eikenberg, on the other hand discloses a holder for retaining the solid-state imaging element array: first means for moving the holder between a first position at which an optical axis related to light incident to the solid-state imaging element array coincides with a center of the first region and a second position at which the optical axis coincides with a center of the second region; second means for fixing the holder at the first position during the first mode of operation of the imaging device, and fixing the holder at the second position during the second mode of operation of the imaging device; third means for generating a first picture signal from signal components generated in the first region of the solid-state imaging element array during the first mode of operation of the imaging device; and fourth means for generating a second picture signal from signal components generated in the second region of the solid-state imaging element array during the second mode of operation of the imaging device.

More specifically, Eikenberg discloses a holder for retaining the solid-state imaging element array (figures 3A-3B; column 8 lines 22 *et seq.*; holder 400): first means for moving the holder between a first position at which an optical axis related to light incident to the solid-state imaging element array coincides with a center of the first region (figures 3A-3B; column 8 lines 22 *et seq.*; first position) and a second position at which the optical axis coincides with a center of the second region (figures 3A-3B; column 8 lines 22 *et seq.*; second position); second means for fixing the holder at the first position during the first mode of operation of the imaging device (figures 3A-3B; column 8 lines 22 *et seq.*; first position), and fixing the holder at the second position during the second mode of operation of the imaging device (figures 3A-3B; column 8 lines 22 *et seq.*; second position); third means for generating a first picture signal from signal components generated in the first region of the solid-state imaging element array during the first mode of operation of the imaging device (figures 3A-3B; column 8 lines 22 *et seq.*; sensor captures a first target area at first position); and fourth means for generating a second picture signal from signal components generated in the second region of the solid-state imaging element array during the second mode of operation of the imaging device (figures 3A-3B; column 8 lines 22 *et seq.*; sensor captures a second target area at second position).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Eikenberg with the teachings of Parulski et al. to increase the regulation of the images using the

different regions of Eikenberg. Also, in column 3 lines 25 – 34 Eikenberg teaches that financial and technical difficulties are reduced using his system.

Regarding **claim 2**, as mentioned above in the discussion of claim 1, Parulski et al. in further view of Eikenberg teaches all of the limitations of the parent claim. Additionally, Parulski et al. teaches that the matrix in the solid-state imaging element array has a first predetermined number "a" of photosensor pixels in a horizontal direction and a second predetermined number "b" of photosensor pixels in a vertical direction (figure 9; column 7, lines 12 – 46), the first region has the first predetermined number "a" of photosensor pixels in the horizontal direction and the second predetermined number "b" of photosensor pixels in the vertical direction (figure 9, 1536 pixel section; column 7, lines 12 – 46), and the second region has a third predetermined number "c" of photosensor pixels in the horizontal direction and the second predetermined number "b" of photosensor pixels in the vertical direction (figure 9, 1280 pixel section; column 7, lines 12 – 46), the third predetermined number "c" is smaller than the first predetermined number "a" (figure 9, 1536 pixel section and 1280 pixel section; column 7, lines 12 – 46).

Regarding **claim 4,** Parulski et al. teaches an imaging device comprising: a solid-state imaging element array including a matrix of photosensor pixels (figures 4, 5, and 7 – 9; column 2, lines 10 – 31 and column 3, lines 38 *et seq.*); first means for setting an effective area in the solid-state imaging element array

to a first region during a first mode of operation of the imaging device (figure 9, 1536 pixel section; column 7, lines 12 – 46), and setting the effective area to a second region during a second mode of operation of the imaging device (figure 9, 1280 pixel section; column 7, lines 12 – 46), the first and second regions being different from each other in number of photosensor pixels contained therein (figure 9, 1536 pixel section and 1280 pixel section; column 7, lines 12 – 46); an optical system extending in front of the solid-state imaging element array (optical system 10 including adjustable aperture 26 leading to the image sensor 12; column 2 line 66 – column 3 line 15); second means included in the optical system for moving an optical axis of the optical system relative to the solid-state imaging element array (optical system 10 including adjustable aperture 26 leading to the image sensor 12; column 2 line 66 – column 3 line 15);

However, Parulski et al. fails to disclose a third means for controlling the second means to set the optical axis coincident with a center of the first region during the first mode of operation of the imaging device, and to set the optical axis coincident with a center of the second region during the second mode of operation of the imaging device; fourth means for generating a first picture signal from signal components generated in the first region of the solid-state imaging element array during the first mode of operation of the imaging device; and fifth means for generating a second picture signal from signal components generated in the second region of the solid-state imaging element array during the second mode of operation of the imaging device.

Eikenberg, on the other hand discloses a third means for controlling the second means to set the optical axis coincident with a center of the first region during the first mode of operation of the imaging device, and to set the optical axis coincident with a center of the second region during the second mode of operation of the imaging device; fourth means for generating a first picture signal from signal components generated in the first region of the solid-state imaging element array during the first mode of operation of the imaging device; and fifth means for generating a second picture signal from signal components generated in the second region of the solid-state imaging element array during the second mode of operation of the imaging device.

More specifically, Eikenberg discloses a third means for controlling the second means to set the optical axis coincident with a center of the first region during the first mode of operation of the imaging device (figures 3A-3B; column 8 lines 22 *et seq.*; first position), and to set the optical axis coincident with a center of the second region during the second mode of operation of the imaging device (figures 3A-3B; column 8 lines 22 *et seq.*; second position); fourth means for generating a first picture signal from signal components generated in the first region of the solid-state imaging element array during the first mode of operation of the imaging device (figures 3A-3B; column 8 lines 22 *et seq.*; sensor captures a first target area at first position); and fifth means for generating a second picture signal from signal components generated in the second region of the solid-state imaging element array during the second mode of operation of the

imaging device (figures 3A-3B; column 8 lines 22 *et seq.*; sensor captures a second target area at second position).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Eikenberg with the teachings of Parulski et al. to increase the regulation of the images using the different regions of Eikenberg. Also, in column 3 lines 25 – 34 Eikenberg teaches that financial and technical difficulties are reduced using his system.

Regarding **claim 5**, as mentioned above in the discussion of claim 4, Parulski et al. in further view of Eikenberg teaches all of the limitations of the parent claim. Additionally, Parulski et al. teaches that the matrix in the solid-state imaging element array has a first predetermined number "a" of photosensor pixels in a horizontal direction and a second predetermined number "b" of photosensor pixels in a vertical direction (figure 9; column 7, lines 12 – 46), the first region has the first predetermined number "a" of photosensor pixels in the horizontal direction and the second predetermined number "b" of photosensor pixels in the vertical direction (figure 9, 1536 pixel section; column 7, lines 12 – 46), and the second region has a third predetermined number "c" of photosensor pixels in the horizontal direction and the second predetermined number "b" of photosensor pixels in the vertical direction (figure 9, 1280 pixel section; column 7, lines 12 – 46), the third predetermined number "c" is smaller than the first predetermined number "a" (figure 9, 1536 pixel section and 1280 pixel section; column 7, lines 12 – 46).

Allowable Subject Matter

Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter for **claim 3**: The imaging device as recited in claim 1, **wherein the first means comprises a guide bar, means for slidably supporting the holder on the guide bar, a movable lever, and means for moving the holder along the guide bar in accordance with movement of the lever** is not discussed or suggested in any of the prior art that was searched.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ben Shoshan et al. (US patent No. 6,670,986) teaches the moving of the CCD in a first and a second position.

Miyahara (US PgPub 2002/0054228) teaches two areas on CCD for focusing and outputting signals.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usman Khan whose telephone number is (571) 270-1131. The examiner can normally be reached on Mon-Thru 6:45-4:15; Fri 6:45-3:15 or Alt. Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Usman Khan
03/23/2007
Patent Examiner
Art Unit 2622

DAVID OMETZ
SUPERVISORY PATENT EXAMINER